**Chapter 4: Developing Requirements**

### 4.1 Domain Analysis

The process by which a software engineer learns about the domain to better understand the problem:

- The **domain** is the general field of business or technology in which the clients will use the software.
- A **domain expert** is a person who has a deep knowledge of the domain.

**Benefits of performing domain analysis:**

- Faster development
- Better system
- Anticipation of extensions

**Domain Analysis document**

A. Introduction
B. Glossary
C. General knowledge about the domain
D. Customers and users
E. The environment
F. Tasks and procedures currently performed
G. Competing software
H. Similarities to other domains

**Example of domain analysis document**

http://www.site.uottawa.ca/~laganier/seg3700/cedomain.htm

### 4.2 The Starting Point for Software Projects

- Requirements must be determined
- Clients have produced requirements

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### 4.3 Defining the Problem and the Scope

**A problem can be expressed as:**

- A difficulty the users or customers are facing.
- Or as an opportunity that will result in some benefit such as improved productivity or sales.

The solution to the problem normally will entail developing software.

**A good problem statement is short and succinct**
Defining the Scope

Narrow the scope by defining a more precise problem
• List all the things you might imagine the system doing
  —Exclude some of these things if too broad
  —Determine high-level goals if too narrow

Example: A university registration system

Initial list of problems with very broad scope
- Exam scheduling
- Room allocation
- Fee payment
- Browsing courses
- Registering

Narrowed scope
- Exam scheduling
- Room allocation
- Fee payment
- Browsing courses
- Registering